AMENDMENT UNDER 37 C.F.R. § 1.312 Attorney Docket No.: Q85508

U.S. Application No.: 10/519,486

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (previously presented): A flexible wiring substrate comprising

an insulating substrate,

a wiring pattern formed on a surface of the insulating substrate, and

a solder resist layer formed on a surface of the wiring pattern,

wherein the solder resist layer is formed on a part of the surface of the wiring pattern to

leave at least terminal portions of the wiring pattern uncovered by the solder resist layer,

wherein the uncovered terminal portions of the wiring pattern have a tin-bismuth alloy

plating layer which is formed on the surface of the wiring pattern, and

wherein the wiring pattern is a multilayer comprising a base layer formed of a conductor

and a first tin plating layer, and

a second tin plating layer is disposed between the first tin plating layer and the tin-

bismuth alloy plating layer, and formed adjacent to the solder resist layer, on the same surface of

the wiring pattern as the surface where the solder resist layer is formed.

2. (canceled).

3. (original): A flexible wiring substrate according to claim 1, wherein the first tin

plating layer has a thickness of 0.001 µm to 0.6 µm.

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4-6. (canceled).

7. (currently amended): A flexible wiring substrate according to claims 5 or 61, wherein

the first tin plating layer is not subjected to heat treatment before provision of the solder resist

layer.

8. (currently amended): A flexible wiring substrate according to any of claims 1 to 6 or

3, wherein the wiring pattern further comprises a patterned copper layer and the first tin plating

layer formed on the copper layer.

9. (previously presented): A flexible wiring substrate according to claim 7, wherein the

wiring pattern further comprises a patterned copper layer and the first tin plating formed on the

copper layer.

10. (previously presented): A method for producing a flexible wiring substrate

including an insulating substrate, a wiring pattern formed on a surface of the insulating substrate,

and a solder resist layer formed on a surface of the wiring pattern, wherein the solder resist layer

is formed on a part of the surface of the wiring pattern to leave at least terminal portions of the

wiring pattern uncovered by the solder resist layer, wherein the uncovered terminal portions of

the wiring pattern have a tin-bismuth alloy plating layer which is formed on the surface of the

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wiring pattern, and wherein the wiring pattern is a multilayer comprising a base layer formed of a conductor and a first tin plating layer, and wherein a second tin plating layer is disposed between the first tin plating layer and the tin-bismuth alloy plating layer, and formed adjacent to the solder resist layer, on the same surface of the wiring pattern as the surface where the solder resist layer is formed, characterized in that the method comprises

a step of forming a base layer of the wiring pattern through patterning of a conductor layer;

a step of forming a first tin plating layer on the base layer;

a step of forming a solder resist layer so as to cover a first region of the first tin plating layer such that a second region of the first tin plating layer is left uncovered;

a step of forming a second tin plating layer on the second region of the first tin plating layer; and

a step of providing a tin-bismuth alloy plating layer on at least a portion of the region of the second tin plating layer.

- 11. (original): A method for producing a flexible wiring substrate according to claim 10, wherein the first tin plating layer is formed so as to have a thickness of 0.001 μ m to 0.6 μ m.
- 12. (original): A method for producing a flexible wiring substrate according to claim 10, wherein there are performed a step of forming the first tin plating layer so as to have a thickness

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of 0.001 μm to 0.2 μm and, subsequently, a step of forming the solder resist layer without performing heat treatment.